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Hotelling et al.

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# (54) MULTIPOINT TOUCH SURFACE CONTROLLER

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- (52) **U.S. Cl.**CPC ...... *G06F 3/044* (2013.01); *G06F 3/0418* (2013.01)
- (58) **Field of Classification Search**USPC ....... 345/173–178; 327/50–57, 292; 250/214
  See application file for complete search history.

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## (57) **ABSTRACT**

A multipoint touch surface controller is disclosed herein. The controller includes an integrated circuit including output circuitry for driving a capacitive multi-touch sensor and input circuitry for reading the sensor. Also disclosed herein are various noise rejection and dynamic range enhancement techniques that permit the controller to be used with various sensors in various conditions without reconfiguring hardware.

#### 22 Claims, 12 Drawing Sheets

